



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/708,036   | 02/04/2004  | Ashok V. Joshi       | MIC 011125CO01      | 2035             |
| 55162  | 7590        | 12/19/2006           | EXAMINER            |                  |
| CERAMATEC, INC.<br>2425 SOUTH 900 WEST<br>SALT LAKE CITY, UT 84119 |             |                      | GHALI, ISIS A D     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1615                |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 12/19/2006 | PAPER         |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/708,036             | JOSHI, ASHOK V.     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Isis A. Ghali          | 1615                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 October 2006.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

|  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

The receipt is acknowledged of applicants' amendment filed 10/02/2006.

### *Election/Restrictions*

1. Newly submitted claims 11-14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims recites photoreactive materials that are distinct from the originally present reactive materials selected from peroxides and excess oxygen containing compounds as claimed in claims 4 and 5. Therefore, claims 11-14 can stand separate patent in the art. Photoreactive materials are classified in class 423/324. Additionally, photoreactive materials will require new search.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. This application contains claims 11-14 drawn to an nonelected invention. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Art Unit: 1615

Claims 1-10 are included in the prosecution.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,985,388 ('308).

US '308 disclosed material for coating medical devices comprising metal oxides such as silver oxide and zinc oxide (abstract; col.4, lines 20-23; col.7, lines 11-21). The material can be used in medical devices such as wound dressing or prepared in ointment, solution or paint, i.e. reads on support and substrate (col.7, lines 35-42; col.8, lines 17-20). The silver oxide deposited with atom molecules of a different material. The different material includes metals such as Ti, Zn, Si, or oxides or halides thereof (col.7, lines 11-21) and this reads on the metal ion exchanged membrane recited in claim 2. The reference disclosed method for incorporating the material into the substrate comprising mixing the powdered metal with the adhesive tape (col.17, lines 44-46).

Art Unit: 1615

5. Claims 1-3, 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,333,093 ('093).

US '093 disclosed wound dressing where the skin contacting surface comprises substrate associated with metal selected from the group comprising silver (abstract; col.3, lines 1-7; col.5, line 40). The skin-contacting layer comprises matrix that incorporates the silver oxide deposited with atom molecules of a different material. The different material includes metals such as Ti, Zn, Si, or oxides or halides thereof (col.3, lines 8-13); and this reads on the metal ion exchanged membrane recited in claim 2. The reference disclosed conventional method for incorporating the material into the substrate comprising mixing the powdered metal and the substrate (col.9, lines 27-35).

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of US '308 or US '093 each in view of US '6,190,407 ('407).

The teachings of US '308 and US '093 are discussed above, however, US '308 does not teach the materials recited in claim 4.

US '407 teaches medical article such as wound dressing associated with antimicrobial element to provide the desired antimicrobial activity over selected period of time (abstract; col.5, line 60). The medical article comprises substrate comprises elemental metal, preferably silver, that is oxidized by super oxides (col.11, lines 25-40; claims 1-5, and 12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide medical article comprising substrate and metal oxides as disclosed by any of US '308 or US '093, and add super oxide to the medical as disclosed by US '407, motivated by the teaching of US '407 that super oxide oxidize the metal to provide controlled antimicrobial activity, with reasonable expectation of having medical article comprising substrate and super oxide oxidizing elemental metal to provide a controlled antimicrobial effect of the medical article.

Art Unit: 1615

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of US '308 or US '093 each in view of US 6,573,205 ('205).

The teachings of US '308 and US '093 are discussed above, however, US '308 does not teach the materials recited in claim 5.

US '205 teaches infection control products such as wound dressing comprising substrate and perovskites (abstract; col.4, lines 20-55; col.10, lines 31-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide medical article comprising substrate and metal oxides as disclosed by any of US '308 or US '093, and add perovskites to the medical article as disclosed by US '205, motivated by the teaching of US '205 that material comprising perovskites such as wound dressing are capable for infection control, with reasonable expectation of having medical products such as wound dressing comprising substrate and perovskites that controls infection of the wound effectively.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,267,782 disclosed medical articles with adhered antimicrobial elemental metals.

#### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1615

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis A. Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Isis A Ghali  
Primary Examiner  
Art Unit 1615

IG

*Isis Ghali*